

## Claims

1. Nucleic acid sequence according to SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:5 or SEQ ID NO:7 or their fragment or derivative or a nucleic acid sequence that hybridizes with the nucleic acid sequence according to SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:5 or SEQ ID NO:7 and having the biological activity of the nucleic acid sequence according to SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:5 or SEQ ID NO:7.
2. Nucleic acid sequence according to claim 1, whereas the hybridising nucleic acid sequence hybridises under stringent conditions with the nucleic acid sequence according to SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:5 or SEQ ID NO:7.
3. Polypeptide, comprising an amino acid sequence according to SEQ ID NO:3, SEQ ID NO:6 or SEQ ID NO:8.
4. Vector, comprising a nucleic acid sequence according to claim 1 or 2.
5. Vector according to claim 4, further comprising one or more regulatory elements that ensure the transcription and/or translation of the nucleic acid sequence according to claim 1 or 2.
6. Method for the production of plants, comprising the stable integration of at least one nucleic acid sequence according to claim 1 or 2 into the genome of plant cells or plant tissues and regeneration of the obtained plant cells or plant tissues to plants.
7. Method according to claim 6, whereas the integrated nucleic acid sequence further comprises one or more regulatory elements, which ensure the transcription and/or translation of the nucleic acid sequence.
8. Method according to claim 6 or 7, whereas the integrated nucleic acid sequence is expressed in antisense orientation.

9. Method according to claim 6 or 7, whereas the integrated nucleic acid sequence has the activity of a ribozyme, which represses the biological activity of the endogenous nucleic acid sequence according to claim 1 or 2.

5

10. Method according to claim 6, whereas the nucleic acid sequence is integrated via homologous recombination into the genomic region of the homologous endogenous gene.

11. Transformed plant cell or transformed plant tissue, comprising one stable integrated nucleic acid sequence according to claim 1 or 2 in the genome of said plant cell or plant tissue.

10

12. Plant cell or plant tissue according to claim 11, regenerable to a seed producing plant.

13. Transgenic plant and their seeds comprising a recombinant nucleic acid sequence according to claim 1 or 2.

15

add Gr 7